

Title (en)

TIRE HAVING RADIO FREQUENCY IDENTIFICATION DEVICE FOR MONITORING STRUCTURAL HEALTH

Title (de)

REIFEN MIT RFID-VORRICHTUNG ZUR ÜBERWACHUNG DER STRUKTURELLEN GESUNDHEIT

Title (fr)

PNEU AYANT UN DISPOSITIF D'IDENTIFICATION À FRÉQUENCE RADIO POUR SURVEILLER UNE SANTÉ STRUCTURELLE

Publication

**EP 3237237 B1 20191016 (EN)**

Application

**EP 15873911 A 20151113**

Priority

- US 201462096060 P 20141223
- US 2015060513 W 20151113

Abstract (en)

[origin: WO2016105687A1] A tire includes a plurality of tire components defining a plurality of layers. A radio frequency identification (RFID) tag is disposed between at least two of the plurality of layers. The RFID tag is in contact with each of the at least two layers and is configured to transmit a response signal in response to receiving a request signal. When no air is in a region surrounding the RFID tag, a first response signal is emitted from the tire at a first frequency and first power. However, when air is in the region surrounding the RFID tag, a second response signal is emitted from the tire at the first frequency and a second power different from the first power.

IPC 8 full level

**B60C 23/00** (2006.01); **B60C 11/24** (2006.01); **B60C 23/02** (2006.01); **B60C 23/04** (2006.01); **B60C 25/00** (2006.01); **G06K 17/00** (2006.01)

CPC (source: EP US)

**B60C 11/24** (2013.01 - EP US); **B60C 11/243** (2013.01 - EP US); **B60C 11/246** (2013.01 - EP US); **B60C 23/0444** (2013.01 - US); **B60C 23/0493** (2013.01 - US); **G06K 19/07764** (2013.01 - EP US); **H01Q 1/2241** (2013.01 - US); **H01Q 1/325** (2013.01 - US); **B60C 2019/004** (2013.01 - EP US); **B60C 2019/007** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2016105687 A1 20160630**; BR 112017013686 A2 20180109; EP 3237237 A1 20171101; EP 3237237 A4 20180725; EP 3237237 B1 20191016; JP 2018505088 A 20180222; JP 6416400 B2 20181031; US 10460226 B2 20191029; US 2017357887 A1 20171214

DOCDB simple family (application)

**US 2015060513 W 20151113**; BR 112017013686 A 20151113; EP 15873911 A 20151113; JP 2017531891 A 20151113; US 201515538238 A 20151113